



PATENT  
PD-YR1-9

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Lenny Low et al.

: Date: March 23, 2002

Serial No. 09/822,073

: Group Art Unit: 3743

Filed: March 30, 2001

: Examiner: Christopher M.

For: Heat Transfer of a Remote Heat Source Using a Loop  
Heat Pipe

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APR 04 2002

TECHNOLOGY CENTER R3700

TRANSMITTAL LETTER

The Commissioner of Patents and Trademarks  
Washington, D.C. 20231

Sir:

Transmitted herewith is an amendment in the above-identified application.

☒ No additional fee is required.

☐ The fee has been calculated as shown below:

CLAIMS AS AMENDED

CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NO. PREVIOUSLY PAID FOR		PRESENT EXTRA		RATE		ADDITIONAL TOTAL
Total Claims	<u>6</u>	minus	<u>20</u>	=	<u>0</u>	X	\$ 18.00	= \$ 0.00
Independent Claims	<u>3</u>	minus	<u>3</u>	=	<u>0</u>	X	\$ 84.00	= \$ 0.00
Multiple Dependent Claims					<u>0</u>	X	\$ 280.00	= \$ 0.00
TOTAL ADDITIONAL FEES FOR THIS AMENDMENT								\$ 0.00

A cheque in the amount of \$0.00 is enclosed with this Transmittal Letter to cover these costs. This form is submitted in duplicate.

Respectfully submitted

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Reg. No. 29,233

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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: Lenny Low et al. : Date: March 23, 2002  
Serial No. 09/822,073 : Group Art Unit: 3743  
Filed: March 30, 2001 : Examiner: Christopher M. Atkinson  
For: Heat Transfer of a Remote Heat Source Using a Loop : Batch No.:  
Heat Pipe : Patent No.:

**CERTIFICATE OF MAILING  
UNDER 37 CFR 1.8**

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TECHNOLOGY CENTER R3700

The Commissioner of Patents and Trademarks  
Washington, D.C. 20231

Sir:

**Identification of Transmitted Papers**

Amendment comprising 7 pages, Transmittal letter in duplicate, amended drawing figures, replacement reproducing masters, return receipt postcard

I hereby certify that the above-identified correspondence is being deposited with the United States Postal Service on March 23, 2002 with sufficient postage as first class mail, and is addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.

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PATENT  
PD-YR1-9

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Amr  
3/A

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: LENNY LOW ET AL. : Date: March 23, 2002  
Serial No. 09/822,073 :  
Filed: March 30, 2001 : Group Art Unit: 3743  
For: HEAT TRANSFER OF A REMOTE HEAT: :  
SOURCE USING A LOOP HEAT PIPE : Examiner: Christopher. M. Atkinson

AMENDMENT

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Commissioner of Patents and Trademarks  
Washington, D. C. 20231

APR 04 2002

TECHNOLOGY CENTER R3700

Sir:

In response to the Office Action mailed March 13, 2002, please amend the above-identified patent application as follows.

IN THE SPECIFICATION

Please amend the paragraph starting at page 2, line 31 to read as follows

Referring to the drawing figures, Fig. 1 is a perspective view of a portion of a spacecraft 20 and illustrates an exemplary heat transfer system 10a, (or heat dissipation system 10a) in accordance with the principles of the present invention. Fig. 2 is a side view of the spacecraft 20 and heat dissipation system 10a shown in Fig. 1.

[Please amend the paragraph starting at page 2, line 35 to read as follows]

A1  
The spacecraft 20 illustrated in Figs. 1 and 2 comprises an Earth deck 11 that is a transverse panel of the spacecraft 20 on which heat dissipating equipment (heat sources 14) are located. The Earth deck 11 attached to North and South radiator panels 12, 13. Exemplary heat dissipating equipment 14 or heat source 14 is shown as a Ku-band feed horn 14, although there are other heat sources that are located remotely from either of the radiator panels 12, 13, or from heat dissipating apparatus such as heat pipe panels, RF loads, output multiplexer (OMUX) filters, RF switches and circulators (not shown).

[Please amend the paragraph starting at page 3, line 6 to read as follows]

The exemplary heat transfer system 10a comprises a loop heat pipe 10. The loop heat pipe 10 comprises flexible thin walled tubing 15 comprising a loop heat pipe transport line 15 that is coupled between one or more evaporators 17 that are thermally coupled to the heat source 14 (Ku-band feed horn 14) and one or more condensers 16 that are thermally coupled to one or more of the radiator panels 12, 13.